

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. **(Currently Amended)** A method for defining a common time base suitable for use in connection with the operation of a multi-link protocol analyzer in a multi-protocol communications system, the method comprising:

determining a first protocol clock frequency for each of a plurality of transmission protocols at a first link analyzer of the multi-link protocol analyzer, the first protocol clock frequency being associated with a first communications protocol associated with the multi-protocol communications system;

determining a second protocol clock frequency at a second link analyzer of the multi-link protocol analyzer, the second protocol clock frequency being associated with a second communications protocol associated with the multi-protocol communications system, wherein the second protocol clock frequency is unrelated to the first protocol clock frequency; and

using the plurality of communications protocol first and second protocol clock frequencies as a basis for determining a frequency of a reference clock frequency, where the reference clock frequency is different from each of the communications protocol first and second protocol clock frequencies.

2. **(Withdrawn)** The method as recited in claim 1, wherein using the plurality of communications protocol clock frequencies as a basis for determining a reference clock frequency comprises selecting a reference clock frequency that is an integer multiple of each of the plurality of communications protocol clock frequencies.

3. **(Currently Amended)** The method as recited in claim 1, wherein using the plurality of communications first and second protocol clock frequencies as a basis for determining [[a] the reference clock frequency comprises selecting [[a] the reference clock frequency that is to be higher than any of the plurality of communications the first and second protocol clock frequencies.

4. **(Currently Amended)** The method as recited in claim 1, wherein the ~~plurality of first and second~~ communications protocols includes at least one of the following communications protocols: Infiniband; Gigabit Ethernet; SONET; Fibre Channel; and, PCI Express.

5. **(Original)** The method as recited in claim 1, further comprising using the reference clock as a basis to determine at least one of the following: a relative chronological order of selected data events concerning the multi-protocol communications system; and, relative timing of selected data events concerning the multi-protocol communications system.

6. **(Withdrawn)** A method for processing data events associated with a multi-protocol communications system, the method comprising:

transmitting a reference clock having a frequency that is based upon a plurality of communications protocol clock frequencies associated with the multi-protocol communications system, the reference clock frequency being different from each of the communications protocol clock frequencies;

capturing a plurality of data events, the captured data events collectively representing a plurality of communications protocols; and

timestamping at least some of the captured data events, each timestamp being based upon the reference clock.

7. **(Withdrawn)** The method as recited in claim 6, wherein the reference clock frequency comprises a frequency that is an integer multiple of each of the plurality of communications protocol clock frequencies.

8. **(Withdrawn)** The method as recited in claim 6, wherein the reference clock frequency comprises a frequency that is higher than any of the plurality of communications protocol clock frequencies.

9. **(Withdrawn)** The method as recited in claim 6, wherein at least two of the plurality of communications protocols are unsynchronized with respect to each other.

10. **(Withdrawn)** The method as recited in claim 6, wherein the plurality of communications protocols includes at least one of the following communications protocols: Infiniband; Gigabit Ethernet; SONET; Fibre Channel; and, PCI Express.

11. **(Withdrawn)** The method as recited in claim 6, wherein the timestamps are assigned to captured data events using clock boundaries of the reference clock.

12. **(Withdrawn)** The method as recited in claim 6, further comprising using the timestamps as a basis to determine at least one of the following: a relative chronological order of selected data events concerning the multi-protocol communications system; and, relative timing of selected data events concerning the multi-protocol communications system.

13. **(Withdrawn)** The method as recited in claim 6, further comprising receiving the reference clock.

14. **(Withdrawn)** The method as recited in claim 6, further comprising generating the reference clock.

15. **(Currently Amended)** A protocol analyzer configured for use in connection with processing data events associated with a multi-protocol communications system, the protocol analyzer comprising:

a first link analyzer configured to receive data from a first communication link, wherein the first link is associated with a first protocol clock frequency, the first protocol clock frequency being associated with a first communication protocol; and

a second link analyzer in at least indirect communication with the first link analyzer and configured to receive data from a second communication link, wherein the second link is associated with a second protocol clock frequency, the second protocol clock frequency being associated with a second communication protocol, the second protocol clock frequency being unrelated to the first protocol clock frequency;[[,]]

wherein each of the first and second link analyzers are also ~~being~~ configured to receive and transmit a trigger and a reference clock, and each of the first and second link analyzers are further ~~being~~ configured to timestamp data in association with the reference clock, wherein the reference clock is ~~defined~~ determined by a ~~plurality of communications~~ the first and second protocol clock frequencies ~~associated with the multi-protocol communications system,~~ the reference clock being different from each of the ~~communications~~ first and second protocol clock frequencies.

16. **(Original)** The protocol analyzer as recited in claim 15, wherein at least one of the link analyzers is configured to generate the reference clock.

17. **(Original)** The protocol analyzer as recited in claim 15, wherein at least one of the link analyzers is configured to generate the trigger.

18. **(Withdrawn)** The protocol analyzer as recited in claim 15, wherein the reference clock has a frequency that is an integer multiple of each of the plurality of communications protocol clock frequencies associated with the multi-protocol communications system.

19. **(Currently Amended)** The protocol analyzer as recited in claim 15, wherein the reference clock has a frequency that ~~[[that]]~~ is higher than ~~each of the plurality of communications~~ the first and second protocol clock frequencies ~~associated with the multi-protocol communications system.~~

20. **(Withdrawn)** In a multi-link protocol analyzer having a plurality of link analyzers that collectively represent a plurality of different communication protocols and corresponding clock frequencies, a method for processing data events associated with a multi-protocol communications system, the method comprising:

transmitting a reference clock having a frequency that is based upon the plurality of communications protocol clock frequencies associated with the plurality of link analyzers, the reference clock frequency being different from each of the communications protocol clock frequencies;

capturing a plurality of data events, the captured data events collectively representing a plurality of communications protocols; and

timestamping at least some of the captured data events, each timestamp being based upon the reference clock.

21. **(Withdrawn)** The method as recited in claim 20, wherein the reference clock frequency comprises a frequency that is an integer multiple of each of the plurality of communications protocol clock frequencies.

22. **(Withdrawn)** The method as recited in claim 20, wherein the reference clock frequency comprises a frequency that is higher than any of the plurality of communications protocol clock frequencies.

23. **(Withdrawn)** The method as recited in claim 20, wherein at least two of the plurality of communications protocols are unsynchronized with respect to each other.

24. **(Withdrawn)** The method as recited in claim 20, wherein the plurality of communications protocols includes at least one of the following communications protocols: Infiniband; Gigabit Ethernet; SONET; Fibre Channel; and, PCI Express.

25. **(Withdrawn)** The method as recited in claim 20, wherein the timestamps are assigned to captured data events using clock boundaries of the reference clock.

26. **(Withdrawn)** The method as recited in claim 20, wherein the reference clock is transmitted by one of the link analyzers.

27. **(Withdrawn)** The method as recited in claim 20, further comprising using the timestamps as a basis to determine at least one of the following: a relative chronological order of selected data events concerning the multi-protocol communications system; and, relative timing of selected data events concerning the multi-protocol communications system.

28. **(Withdrawn)** The method as recited in claim 20, further comprising receiving the reference clock at a plurality of the link analyzers.

29. **(Withdrawn)** The method as recited in claim 20, further comprising generating the reference clock at one of the link analyzers.

30. **(Withdrawn)** A computer program product for implementing a method for processing data events associated with a multi-protocol communications system, the computer program product comprising:

physical storage computer readable medium carrying computer executable instructions for performing the method, wherein the method comprises:

capturing a plurality of data events, the captured data events collectively representing a plurality of communications protocols; and

timestamping at least some of the captured data events, each timestamp being based upon a reference clock having a frequency that is based upon a plurality of communications protocol clock frequencies.

31. **(Withdrawn)** The computer program product as recited in claim 30, wherein the reference clock frequency comprises a frequency that is an integer multiple of each of the plurality of communications protocol clock frequencies.

32. **(Withdrawn)** The computer program product as recited in claim 30, wherein the reference clock frequency comprises a frequency that is higher than any of the plurality of communications protocol clock frequencies.

33. **(Withdrawn)** The computer program product as recited in claim 30, wherein at least two of the plurality of communications protocols are unsynchronized with respect to each other.

34. **(Withdrawn)** The computer program product as recited in claim 30, wherein the plurality of communications protocols includes at least one of the following communications protocols: Infiniband; Gigabit Ethernet; SONET; Fibre Channel; and, PCI Express.

35. **(Withdrawn)** The computer program product as recited in claim 30, wherein the timestamps are assigned to captured data events using clock boundaries of the reference clock.

36. **(Withdrawn)** The computer program product as recited in claim 30, wherein the data events captured in response the occurrence of a predetermined event.

37. **(Withdrawn)** The computer program product as recited in claim 30, wherein the method further comprises using the timestamps as a basis to determine at least one of the following: a relative chronological order of selected data events concerning the multi-protocol communications system; and, relative timing of selected data events concerning the multi-protocol communications system.

38. **(Withdrawn)** The computer program product as recited in claim 30, wherein the method further comprises generating the reference clock.

39. **(Withdrawn)** The computer program product as recited in claim 30, wherein the method further comprises transmitting the reference clock.

40. **(Withdrawn)** The computer program product as recited in claim 30, wherein the method further comprises receiving the reference clock.